

59. (New) The mutant DNA polymerase of claim 58, wherein said mutant Pfu DNA polymerase comprises one or more mutations selected from the group consisting of: T542P, D543G, K593T, Y595S, Y385Q, Y385S, Y385N, Y385L, Y385H, G387S, G387P, and G388P.

60. (New) A composition comprising a mutant Pfu DNA polymerase produced by expressing a polynucleotide encoding a Pfu DNA polymerase with a reduced DNA polymerization activity, wherein said mutant Pfu DNA polymerase comprises one or more mutations at amino acid positions selected from the group consisting of: T542, D543, K593, Y595, Y385, G387, and G388.

61 (New) A composition comprising a mutant Pfu DNA polymerase comprising a reduced DNA polymerization activity, wherein said mutant Pfu DNA polymerase is produced by the steps:

(a) introducing a mutation into a polynucleotide encoding a wild-type Pfu DNA polymerase to produce said mutant Pfu DNA polymerase comprising one or more mutations at amino acid positions selected from the group consisting of: T542, D543, K593, Y595, Y385, G387, and G388;

(c) expressing said mutant polynucleotide to produce said composition comprising said mutant Pfu DNA polymerase.

62. (New) The composition of claim 60 or 61, wherein said mutant Pfu DNA polymerase comprises one or more mutations selected from the group consisting of: T542P, D543G, K593T, Y595S, Y385Q, Y385S, Y385N, Y385L, Y385H, G387S, G387P, and G388P.

REMARKS

Upon entry of this amendment, claims 1-35, 40-41, 47-48, 54-55, 57-62 are pending. No new matter is introduced by this amendment. Support for the newly added claims may be found throughout the specification and at least at pages 19-34 and pages 52-61.

CONCLUSION

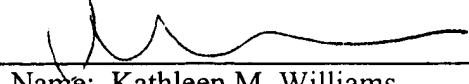
Applicant(s) submit(s) that all claims are allowable as written and respectfully request(s) early favorable action by the Examiner. If the Examiner believes that a telephone conversation

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with Applicant(s') attorney/agent would expedite prosecution of this application, the Examiner is cordially invited to call the undersigned attorney/agent of record.

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Respectfully submitted,


Name: Kathleen M. Williams
Registration No.: 34,380
Customer No.: 27495
Palmer & Dodge LLP
111 Huntington Avenue
Boston, MA 02199-7613
Tel: 617-239-0100

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Marked-up version showing claim amendment

40. (Amended) [The] A mutant Pfu DNA polymerase [of claim 39] with reducedDNA polymerization activity, wherein said mutant Pfu DNA polymerase comprises one or more mutations at amino acid positions selected from the group consisting of: [D405, Y410,] T542, D543, K593, Y595, Y385, G387, and G388.

41. (Amended) The mutant DNA polymerase of claim 40, wherein said mutant Pfu

DNA polymerase comprises one or more mutations selected from the group consisting of:

[D405E, Y410F,] T542P, D543G, K593T, Y595S, Y385Q, Y385S, Y385N, Y385L, Y385H, G387S, G387P, and G388P.

47. (Amended) [The] A composition [of claim 46, wherein said] comprising a mutant Pfu DNA polymerase, wherein said mutant DNA polymerase comprises one or more mutations at amino acid positions selected from the group consisting of: [D405, Y410,] T542, D543, K593, Y595, Y385, G387, and G388.

48. (Amended) The composition of claim 47, wherein said mutant Pfu DNA polymerase comprises one or more mutations selected from the group consisting of: [D405E, Y410F,] T542P, D543G, K593T, Y595S, Y385Q, Y385S, Y385N, Y385L, Y385H, G387S, G387P, and G388P.

54. (Amended) [The] A kit [of claim 53] for DNA synthesis comprising a mutant DNA polymerase which comprises a reduced DNA polymerization activity and packaging material therefor, wherein said mutant Pfu DNA polymerase comprises one or more mutations at amino acid positions selected from the group consisting of: [D405, Y410,] T542, D543, K593, Y595, Y385, G387, and G388.

55. (Amended) The kit of claim 54, wherein said mutant Pfu DNA polymerase comprises one or more mutations selected from the group consisting of: [D405E, Y410F,] T542P, D543G, K593T, Y595S, Y385Q, Y385S, Y385N, Y385L, Y385H, G387S, G387P, and G388P.